Montana Department of Environmental Quality

Solid Waste Program

Newsletter

Volume 21 July 2004

Montana Recycling Survey Results

Brian Spangler
Air, Energy and Pollution Prevention

The Business and Community Assistance Program of the Air, Energy and Pollution Prevention Bureau conducted its first economic survey of recycling in Montana. Participants included collectors, processors and manufactures of recycled goods. The results were impressive and include only those who responded to the survey, conducted primarily by phone. In Montana there are 300 full-time jobs and 40 part-time jobs related to recycling with over nine million dollars in wages and benefits. The survey showed revenues of 89 million dollars and an average wage of 29,000 dollars per year. The numbers indicate that recycling is not just fad, but a vibrant part of Montana's economic base with activity throughout most of the state.

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Inside This Issue

Bureau Changes Name

New Bureau Chief at the helm

The Permitting and Compliance Division has consolidated some of its functions into new Bureaus with more closely related functions. The former Community Services Bureau has become the Waste and Underground Tank Management Bureau (WUTMB) that now includes the permitting and regulation of asbestos, hazardous waste, solid waste, junk vehicles, septic pumpers, and underground petroleum storage tanks. With the Bureau name change also comes a new Bureau Chief.

In January, 2004, Ed Thamke was named the new Bureau Chief of the WUTMB here at DEQ. Ed has a degree in geology from the University of Iowa and worked in mining and exploration prior to going to work for one of DEQ's predecessors agencies, the Montana Department of Health and Environmental Sciences, in 1991.

Ed's initial experience in state government was in licensing and regulation of solid waste management systems. Most recently, Ed was chief of the Complaint Management Section of DEQ's Enforcement Division, responsible for the agency's

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HAULING JUNK VEHICLES

By Darrell Stankey

On January 1, 2004 new Federal regulations went into effect dealing with the "***Development of a North American Standard for Protection Against Shifting and Falling Cargo***". The most noticeable, and most visible, effect of the new regulations is with the transportation of crushed or flattened vehicles. In most instances, you will be able to see a mesh netting (or something similar) around each bundle of crushed cars.

The new regulations create safety standards for the hauling of various types of materials. For crushed cars, one major concern has been that parts come loose and fall off the transport vehicle. Loose parts falling off of the crushed cars create the potential for another motorist to be the recipient of these unwelcome and unwanted materials. Injuries and/or serious damage to other motorists could occur. To keep parts from causing situations like this, "vehicles used to transport flattened or crushed vehicles must be equipped with a means to prevent loose parts from falling from all four sides of the vehicle which extends to the full height of the cargo."

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BUREAU CHANGES NAME
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response to citizen complaints, spill and methamphetamine issues.

Ed lives in Helena with his wife, Joanna, a hydrogeologist for the United States Geological Survey and their two children, Irene and Clara. The Thamkes are avid outdoor recreationists and active in church and community activities.

Waste Management Facilities Important Dates to Remember

Due dates for Fiscal Year 2004
(July 1, 2004 through June 30, 2005)

1st quarter fee July 31, 2004

2nd quarter fee October 31, 2004

3rd quarter fee January 31, 2005

4th quarter fee April 30, 2005

Renewal Applications April 1, 2005

Financial Assurance Update April 1, 2005

OPEN BURNING RULE CHANGES FOR LICENSED LANDFILL/BURN SITES

David Aguirre
Air Resources Management Bureau

On December 31, 2002, several changes to the Open Burning Rules found in the Administrative Rules of Montana (ARM) Title 17, Chapter 8, Subchapter 6, became final and effective. The changes are relatively straightforward and have been working well since they were promulgated.

Landfill open burning permits are now valid for one year from the date the permit is issued final. Landfill open burning permits were previously valid for 30 days and/or a single burn, whichever took place first. Extending the length of time that landfill open burning permits are valid has successfully alleviated the problem of licensed landfills/burn sites needing to go through the permitting process (approximately 35 days) again when they are not able to accomplish their burns (due to reasons beyond their control) within the allotted time frame.

Once a licensed landfill/burn site has obtained a landfill open burning permit, a landfill open burning request form must be submitted to the Department. The Department approves or denies the landfill open burning request within 10 days of receiving the request. The Department, or its designated representative (i.e. county sanitarians) must inspect the pile prior to every burn and sign off on the Landfill Open Burning Request Form that the pile was inspected and did not contain any prohibited materials.

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HAULING JUNK VEHICLES
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The crushers that are working under contract to the State to crush and haul away the vehicles in the county yards are using the mesh material approach to meet these new Federal regulations.

You may be asking by now: "*How does this affect my program*"?

The discussion so far talks about crushed or flattened vehicles. However, there are requirements in the new regulations for hauling automobiles, light trucks and vans. The revised requirements for these vehicles addresses how the vehicle is secured (chained down, strapped down, etc.), but does not require loose parts containment, as with crushed cars.

Why is this important? Because many of the junk vehicles (automobiles, light trucks and vans) hauled by the county programs are in a condition that might allow loose parts to fall off while being transported to the county motor vehicle graveyard. Usually these junk vehicles are not "flattened or crushed vehicles" so they fall outside the containment regulations.

But does that remove us, as a governmental agency, from the liability for injuries or damages sustained by an unsuspecting motorist if a part falls off and causes such injury or damage? I think not.

We, as individual programs and as a collective group, will need to determine if we want to try to wrap or secure the junk vehicles being hauled into the county yards. I can tell you that the Montana Highway Patrol strongly recommends that we do so. I was told that although we are exempted as governmental units from the new securing and containment regulations, we are not exempted from the liability that goes along with materials falling off and causing injury or damage.

We will be including a training talk by a member of the Montana Highway Patrol about this new set of regulations when we hold our annual training session this fall.

In the meantime, please let me know your thoughts on this issue. I can be reached by phone at 444-3048 or by email dstankey@state.mt.us.

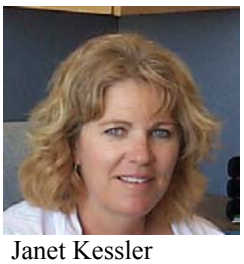
Meet the Program Staff:


Rick Thompson


Pat Crowley


Darrell Stankey


Bruce Meyer


Janet Kessler


Tim Stepp


Pat Potts


Michele Fitcher


Mike DaSilva


Mary Hendrickson


George Scriba

ASBESTOS BASICS

John Podolinsky
Asbestos Control Program

The DEQ's Asbestos Control Program oversees the permitting of asbestos abatement projects, the accreditation of asbestos-related occupations, the approval and auditing of asbestos training course providers, and provides compliance assistance to the regulated community and interested parties. The Department is also delegated by EPA to administer the asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP, 40 CFR Part 61 Subpart M National Emission Standard for Asbestos). The asbestos NESHAP governs a host of asbestos emission sources including building renovation and demolition activities and asbestos landfills.

What Is Asbestos?

Asbestos is a name given to a group of naturally occurring minerals including its regulated fibrous forms: chrysotile, amosite, crocidolite, anthophyllite, actinolite, and tremolite. The word asbestos is derived from the Greek language meaning inextinguishable.

How Is Asbestos Used and Where Would You Find It?

Asbestos had been used in a variety of materials and applications for purposes of reinforcement, heat and cold insulation, condensation control, friction, fire protection, sound dampening, decoration, texturing, chemical resistance, and other applications. Asbestos was used in over 3500 types of materials. Some materials, such as vermiculite might be contaminated with asbestos naturally. Materials which contain more than 1% asbestos are called asbestos-containing materials (ACM). Typically, asbestos is found in thermal system insulation such as pipe and boiler insulation, surfacing material such as fireproofing and wallboard, and miscellaneous materials such as floor and ceiling tiles. In America, asbestos was used in a variety of materials from the late 1800s to the present; however, its use has declined. Contrary to popular belief, asbestos is not banned from certain products in America. Certain materials such as floor tile, linoleum, adhesives, roofing products, clutch and brake assemblies, etc, might contain asbestos. Prior to purchasing products or materials determine whether asbestos is present. Asbestos-containing materials are currently being used widely in developing and industrializing countries.

You may have run across the terms friable and non-friable asbestos-containing materials. EPA's NESHAP regulation defines friability as the ability of a dry asbestos-containing material to be crumbled, pulverized, or reduced to powder by hand pressure. Examples of friable asbestos include thermal system insulation and spray-on fireproofing. Asbestos-containing materials such as floor tile, roofing, asbestos cement products, and gaskets are typically non-friable. Be aware that demolition and renovation activities can render nonfriable ACM friable, and thus, more regulated. Contact the Asbestos Control Program for more information.

Why Is Asbestos A Concern?

Asbestos is a health concern because it is a carcinogen, meaning it causes cancer. Asbestos can break down into very small fibers that can become airborne and stay airborne for a long time. Exposure generally occurs by inhalation or ingestion. Asbestos causes asbestos-related illnesses such as asbestosis, mesothelioma, and other cancers. Asbestosis is an illness characterized by the scarring of the lungs that reduces the lungs' ability to function. Mesothelioma is a cancer of the membrane lining the chest or abdominal cavity specifically related to asbestos. Lung cancer and other cancers have been linked to asbestos exposure. Epidemiological studies (studies of people and diseases) document asbestos-related illnesses caused by exposure to asbestos in many occupations including mining, milling, manufacturing, insulating, shipbuilding, construction, and others.

Cases of asbestos-related illnesses have also been documented in persons exposed to asbestos indirectly in non-occupational settings. Wives, husbands, and children of people who worked with asbestos have contracted asbestos-related illnesses after being exposed to asbestos dust brought home on the clothes of those people.

Generally, a latency period of 10 to 30 years accompanies asbestos exposure before an asbestos-related illness develops. This latency period is dependent on other factors in a person's life, including whether the affected person smokes or smoked. According to research statistics, a smoker who is exposed to asbestos is over 50-90 times more likely to develop an asbestos-related illness than a non-smoker. The reason why smokers are so susceptible to asbestos is due to the loss of the lungs' capability to rid itself of fibers.

If you have any questions concerning asbestos, contact the Asbestos Control Program at 444-5300 or visit us at www.deq.state.mt.us/pcd/

Septic Tank Pumpers Advisory Committee Formed

In May, 2004, the Septic Tank Pumper Advisory Committee (SPAC) was formed to advise DEQ on Rule-Making and other developing septic industry issues. The committee plans to meet quarterly, with the next meeting on October 8, 2004.

The State was divided into seven (7) sectors and one primary representative from each sector was selected to serve on the Committee. In addition, a secondary representative was selected from each sector that would represent the sector in the event the primary representative was unable to attend. Each representative will gather feedback and disseminate information to/from the licensed pumpers located within the sector they represent to the Committee. The regional representatives and the counties within each region are as follows:

Region 1 Primary representative – Brian Tatman, Heavy Water Haulers Representing the following counties: *Phillips, Daniels, Valley, Sheridan, Roosevelt, Richland, McCone, Garfield, Petroleum, Dawson*

Region 2 Primary representative– Brian Tatman, Heavy Water Haulers Representing the following counties: *Prairie, Wibaux, Fallon, Carter, Custer, Powder River, Rosebud, Treasure, Big Horn*

Region 3 Primary representative – Jamie Hillman, Jim's Backhoe & Septic Service Representing the following counties: *Wheatland, Golden Valley, Musselshell, Yellowstone, Stillwater, Sweet Grass, Park, Carbon*

Region 4 Primary representative – John Clark, Scenic City Pumping; Alternate – Wade Stout, Badger Pass Septic Service Representing the following counties: *Deer Lodge, Silver Bow, Jefferson, Beaverhead, Madison, Gallatin*

Region 5 Primary representative – Conrad Eckert, Eckert's Services; Alternate – Susan Bashor, Sweet Pea's Inc. Representing the following counties: *Lincoln, Flathead, Sanders, Lake, Missoula, Mineral, Granite, Ravalli*

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Montana Recycling
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Funding Received for Mobile Glass Pulverizer

The Business and Community Assistance Program of the Air, Energy and Pollution Prevention Bureau, has received funding for a mobile glass pulverizer to meet the challenges of recycling glass in Montana by developing partnerships and mobile processing for a local end use.

The pulverizer will be operated by Headwaters Cooperative Recycling and will be placed in operation later this summer. In addition to Headwaters' region, it will enable glass recycling in other communities. Headwaters Cooperative Recycling includes thirteen counties in Montana, in addition to a partnership with Yellowstone National Park. Headwaters. A non-profit entity, is the largest recycling cooperative in the United States with a 35,000 square mile territory and has vehicles collecting recyclables throughout their counties and is well suited to coordinate and operate the equipment. The Business and Community Assistance program, Headwaters and Montana Department of Transportation (MDT) will be meeting in the near future to select the manufacturer and specifications. It is anticipated that the pulverizer will be mounted on a trailer with its own generator, that will be powered by biodiesel. The lead-time after the order is placed is 8-10 weeks once the order is placed.

The DEQ has partnered with the MDT and their specifications allows for glass cullet for soil-aggregate filler for road construction. Some other markets for glass cullet are as follows:

landscaping
septic drain fields
retaining wall backfill
drain pipe bedding and backfill
french drains
other uses

The Business and Community Assistance Program's belief and goal is that partnerships of state, tribal and local governments, private industry and non-profit organizations can move recycling forward in the state. This project, which will further establish glass recycling in Montana, is a great step towards this goal.

For more information, contact Brian Spangler at 841-5250 or bspangler@state.mt.us.

Prions and Landfills

By Pat Crowley

There are two major prion diseases that landfill operators may encounter, Bovine Spongiform Encephalopathy (BSE), a.k.a Mad Cow Disease, and Chronic Wasting Disease (CWD). Both are transmissible spongiform encephalopathies (TSE) but are transmitted in different manners and infect different animals. BSE is a disease of cattle and sheep and is transmitted by the feeding of contaminated bone meal from infected animals. It may be transmissible to humans who eat contaminated meat. CWD is a disease of cervids (deer and elk) and is transmitted by contact with contaminated blood, feces, urine, and saliva. It is not known to be transmitted to humans.

The EPA has recently come out with draft recommendations for the landfill disposal of carcasses and laboratory wastes from CWD infected animals, but the same guidelines should perhaps be followed with all TSE wastes. According to the guidance, CWD infected animals should only be disposed of in lined landfills with leachate collection systems. Leachate should be re-circulated. The cell should have a minimum of 20 feet of refuse in place. Lay down 12 inches of absorbent material such as dry sawdust. Place the animals a maximum of two carcasses thick, then cover them with lime or cement kiln dust to fill the voids in between the animals. Then cover with at least three feet of MSW and a foot of intermediate cover. Draft guidance for geomembrane encapsulation is also recommended in the draft guidance document. The location of the carcasses should be recorded and placed in the operating record and the deed restriction filed at the closure of the landfill. Of course, as with all special waste handling, the landfill should be notified in advance when these wastes are expected.

If you need the full details of the draft EPA guidance, please contact the solid waste staff. Additional information from the American Veterinary Association on BSE and CWD can be found at *http://www.avma.org/communications/brochures/default.asp*

Open-burning Rule Changes

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The last change to the open burning rules allows licensed landfills/burn sites to request to burn during the entire year. In the past, the open burning rules did not allow the Department to even consider allowing licensed landfills/burn sites to burn during the winter season (Dec. – Feb.). Adjusting the seasons that licensed landfills/burn sites can request to burn does not mean that the Department will approve all landfill open burning request forms received for the winter season, but it does allow the Department to review the requests. Basically, landfill open burning request forms for the winter season will not be approved unless the burn site is located in an area of Montana that typically has good ventilation throughout the entire year and do not typically have problems with temperature inversions (Airsheds 7, 9, and 10).

For more information on this topic, please contact David Aquirre at (406)444-5287 or email daguirre@state.mt.us

Silly Questions on Renewal Forms?

By Mike DaSilva

Operators often ask why we ask the things we ask on the annual renewal forms? Generally, it is because someone else asks us those same questions.

Legislators get curious about all sorts of numbers like how many tons of garbage are buried in Montana annually and how much of that came from out-of-state. They are also curious about recycling statistics, and want to know what types of waste can go where, how many landfills accept certain types of waste and how well trained are landfill operators and workers.

The Department recycling folks use the information you provide to develop the statistics on statewide recycling and do some of their planning and tracking for their programs.

National publications that are preparing articles frequently call. They are usually compiling national averages or state-by-state statistical lists. We get a number of questions about tipping fees, remaining landfill capacity over numbers of years and total amount of waste disposed of in Montana.

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WANTED: CLASS III VIOLATION-FREE LANDFILLS

Guidance on minimizing and preventing violations associated with Class III landfills.

By Michele Fitcher

Unpredictable weather, equipment maintenance and staffing matters always challenge a Class III landfill. With all these challenges how does a Class III facility operate and remain violation-free? The answer is establishing, maintaining, and periodically reviewing and updating facility goals. Facility goals can range from establishing timelines for equipment maintenance or employee training to designing staff-involved site inspections to identify operational maintenance requirements (update signs, reduce stockpile, remove tires, change access road, etc.).

The following paragraphs describe general goals that are recommended for Class III landfills. Please take the time to review these goals and establish goals that are specific to the needs of your Class III landfill.

> ***Goal #1*** Periodically revisit regulatory requirements for Class III landfills. Does the landfill staff ensure that only Group III wastes such as untreated, unpainted wood-waste, clean concrete (without rebar) and tires are accepted? Are the Group III wastes covered on a quarterly basis? If untreated wood waste is stockpiled and burned in a pit is the landfill staff removing the unacceptable wastes (painted wood, treated wood, wood paneling, etc) prior to burning? If the facility is burning the wood-waste are the ashes removed and disposed of at a licensed Class II landfill?
>
> ***Goal # 2*** Occasionally review the Operation and Maintenance (O&M) Plan. It's easy to get in a routine for months or years without revisiting the O&M Plan. Intercept your own daily routine and walk the site to discover whether or not the current O&M Plan is suitable for maintaining an efficient Class III facility. A well-designed O&M Plan is essential for successfully operating a landfill. If changes are necessary, draft the changes and submit them to the Solid Waste Program for review and approval prior to implementation at the landfill.
>
> ***Goal #3*** Educate your community. It's important to continually educate your community on the proper wastes that are accepted at your Class III landfill. Think outside the box and experiment with different educational tools. Each community is different so it's up to you to discover what works best for your community.

So what are the most common violations cited at a Class III landfill? A variety of numerous violations can be cited at an inspection. In efforts to provide examples I have written a humorous version of fictional field notes taken during a Class III inspection.

Field Notes for June 22, 2002. From my initial glance the stockpiled wood-waste appeared to consist predominately of untreated wood-waste such as large tree branches and clean, untreated lumber. As I continued to make my way around the perimeter of the stockpile, however, a large heap of Non-group III wastes came into view. I must admit, the sight of the white toilet seat mixed in with the clean wood debris automatically jumped out at me. The pile of old wood paneling and the bright red window frames with their glass still intact are obviously out of place at this Class III landfill. There is a sign located directly in front of the stockpiled waste that reads "wood waste here". This vague sign doesn't provide any information to incoming traffic on what is acceptable and what isn't acceptable.

I understand that grass clippings are acceptable ONLY if they are utilized through composting. Ironically, I see the sign that reads, "COMPOST AREA" but I don't see windrows of young and maturing compost on site anywhere, only large piles of plastic bags packed full of yard waste. Surely the windrows are here somewhere!

The concrete pile consists of concrete with 95% of the rebar intact, which is a good indication that everyone has not been trained on proper concrete disposal. Someone needs to utilize the equipment to break up the concrete up and remove the majority of the rebar.

The most interesting thing happened during the inspection - When I asked the operator when they last applied their quarterly cover, I could have sworn I got the look as if I had asked, "Have you seen any green aliens today?" I'll finish my inspection report, make notes, and review the results of my inspection with a landfill representative if possible then continue the 200-mile drive to the next landfill.

The purpose of this comical version of field notes was to provide some humor but more importantly, refresh everyone's minds on the seriousness of maintaining a Class III landfill. Due to the inert nature of Group III wastes Class III landfills are not required to have a Groundwater Monitoring network, which makes inspecting the incoming waste stream even more critical.

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SPAC Committee Formed
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Region 6 Primary representative – Steve Kunkel, Montana Septic; Alternate – Don Heimbigner, Don's Septic Representing the following counties: *Glacier, Toole, Liberty, Hill, Blaine, Chouteau, Pondera, Teton*

Region 7 Primary representative – Vince Hoff, A-1 Septic Services; Alternate – Gary Turney, Gary's Septic Service Representing the following counties: Powell, Lewis & Clark, Cascade, Broadwater, Judith Basin, Meagher, Fergus

Board Chairman: Mike Byrnes, Superior Septic Service

County Sanitarian Representative – Ross Knapper, Gallatin County

DEQ Representative/Secretary Mary Louise Hendrickson, DEQ Solid Waste Program

New items can be placed on the agenda after meetings by contacting the Committee Chairman and Secretary. For more information, contact Mary Louise Hendrickson at 444-1808 or email mhendrickson@state.mt.us

Silly Questions
(*continued from page 6*)

Other states revising their laws and rules ask about closure and post closure plans, costs, formulas and frequency of updates as well as many of the same questions asked by our legislators and the national publications.

We also get a large number of calls from citizens who have some type of waste and want to know the closest facility that will accept it. We give them what information we have, but always recommend that they call the facility before transporting any waste to assure that the waste will be accepted at that particular landfill.

CLASS III VIOLATION-FREE LANDFILLS *(Continued from page 7)*

With a well-designed O&M Plan, a properly trained staff, and knowledgeable community, maintaining a violation-free facility is attainable. We appreciate everyone's hard work. And we look forward to the summer months when we are in the field and able to meet with you to conduct an inspection and provide guidance.

If you have questions or comments regarding this article or questions regarding the requirements for operating a Class III landfill, please contact me at (406) 444-3493 or by email at mfitcher@state.mt.us.

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